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## BOOK REVIEW

*Camellia Culture*, edited by E. C. Tourje. The Macmillan Company, New York, 1958

This publication marks a milestone in the compilation of our knowledge of *Camellia* culture. Assembled here in a book of 484 pages are the notes, methods, experiences, and opinions of 55 qualified *Camellia* authorities.

There are chapters on: plantings; care of *Camellias*; climate; propagation and development; display, shipping, and handling; pests and their control; diseases and methods of treatment; soils, nutrition and moisture; and, breeding and hybridizing. Various chapters are written by one, two or three authors. The authors are all either recognized amateur *Camellia* fanciers or trained research scientists. In spite of the technical nature of several sections, the use of scientific terms has been held to a minimum so that the chapters are readily understood by the layman.

Even though there are 55 different authors, the editing has been so carefully and skillfully

done that one is not conscious of the large number of participants by reason of marked differences in style of writing.

As a compendium of *Camellia* knowledge, both from the cultural as well as scientific aspect, this publication is without equal. It is well illustrated with abundant line drawings and photographs.

This volume was prepared under the auspices of the Southern California *Camellia* Society, Inc., the objective of this Society is "to encourage and promote the science and art of *Camellia* culture". In this regard the Society is to be complimented in achieving this objective through the publication of "*Camellia Culture*".

This book with its wealth of knowledge on all of the aspects of *Camellia* growing is a must for anyone who is more than superficially interested in *Camellias*. "*Camellia Culture*" sells for \$11.50.

WILLIAM S. STEWART



## STUDENT EXPERIMENT

MAELIC HYDRAZIDE TREATMENT OF  
INDOOR FOLIAGE PLANTS

ARTHUR N. BROWN

GROWERS, FLORISTS and home owners have long valued the *Dieffenbochia* for its colorful foliage and its ability to grow well as an indoor ornamental. However, the tendency for this plant to seldom branch, to soon over-grow its container and in time to become spindly with foliage only at the top, leaves room for general culture improvements. Branching can be induced by pinching back, but this may spoil the appearance of the plant. The grower and retailer cannot profitably hold a plant long enough for it to re-grow new tops; the home owner will not pinch or cut his "beauty" when it should be cut.

The chemical, maelic hydrazide, has been used to retard the growth of certain lawn grasses. It has also been used to induce branching on chrysanthemums. The following reports the results of using maelic hydrazide (also designated as MH) as a foliage spray on several indoor ornamentals.

*Materials and Methods.*

Six species were used in the experiment: *Dieffenbochia Roebra supenba*, *Aralia elegantissima*, *Philodendron dubia*, *Peperonia fosteniana*, *Pathos aureus* and *Pellonia fulchra*. Only the effects of MH on *D. Roebra supenba* and *A. elegantissima* will be considered in detail.

The plants were received as 2½" liners and planted in 4" fern pans. After allowing three weeks to establish themselves, they were treated with varying strengths of maelic hydrazide (Diethanolamine salt of 1, 2 - dehydro - 3, 6 pyridazinedion.) To find the most effective concentration, from 500 ppm (parts per million) to 2000 ppm were tried.

The greenhouse temperatures ranged from 70°-80°F. during the days with humidity of 90-100%. Night temperature was 70°, but due to mechanical problems dropped below 60° on several occasions.

The plants were all numbered and measured; the number of stems, nodes, leaves and length of leaves were recorded at the start of the experiment. A similar record was made at the end of the experiment, May 15th, and are shown in the accompanying charts. Fourteen *Dieffenbochia* plants and three of the *Aralia* were treated with each concentration.

Spraying was done on November 11, 1957, when air temperature varied from 69° to 81°F. and humidity was 64%. Each plant was sprayed separately until run-off occurred on both top and bottom sides of the leaves. After the leaves dried the plants were returned to the greenhouse. In the case of the *Dieffenbochia* a second spray was applied March 2nd.

No tests were made to determine how much or how long the material remained on the leaves; however, great care was taken in watering so as not to wash the material from the leaves.

*Results:*

It will be noted that there is marked reduction in leaf size of *Dieffenbochia* with increased concentrations of MH which is undesirable. Plants recovered from this condition and produced excellent specimens (see photo) except in the highest concentration. Although further work is needed to determine the exact time of application and concentration, 1000 to 1500 ppm can be recommended to give the best over-all results in these two species.

These results suggest that maelic hydrazide may be of value to greenhouse operators in producing compact, branched plants.



EFFECTS OF MH SPRAY AS RECORDED MAY 15, 1958

*Dieffenbochia Roebra supenba*  
(Average of 14 plants at each concentration)

PPM	Increase in number of leaves	Average length of 2 mature top leaves	Number of Breaks
500	4	9.4 inches	1.36
750	3	8.6	2.43
1000	3.4	7.5	1.90
1250	3.7	8.6	.86
1500	1.9	6.1	3.90
2000	2.0	6.2	4.90
Control	4.4	9.2	.36

*Aralia elegantissima*  
(Average of 3 plants at each concentration)

PPM	No. of branches	Height	No. of nodes	Total length of stems
500	1.7	5.9 in.	37.0	11.25 inches
750	2.0	3.25	33.7	5.4
1000	4.7	3.75	42.3	7.3
1250	3.5	2.6	36.5	6.6
1500	7.0	2.3	62.3	7.0
2000	3.0	2.4	34.0	6.4
Control*	1.0	5.1	20.0	5.1

\*9 plants in control group



*Aralia elegantissima*: Left to right, treatment with MH—2000 ppm, 1500 ppm, 1250 ppm, 1000 ppm, 750 ppm, 500 ppm and control. Photo Sept. 1, '58.





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